

Abstract

The invention disclosed is directed to a method and apparatus which allows a “rolling shutter” type of read out sequence in a pixel array that is read using a double
5 sampling technique by having the rows of pixels reset a second time in each of their cycles for a second sampling while the rows are being accessed for reading. In this way, each pixel is sampled to compare its voltage level after integration to its voltage level as it is reset. In accordance with the present invention, the row access signal or a signal that is used to generate the row access signal, is used to generate a second reset signal at the
10 correct time while the row is being accessed. The invention is particularly applicable to image sensors having light sensitive elements that are CMOS pixels, and in particular three transistor pixels.